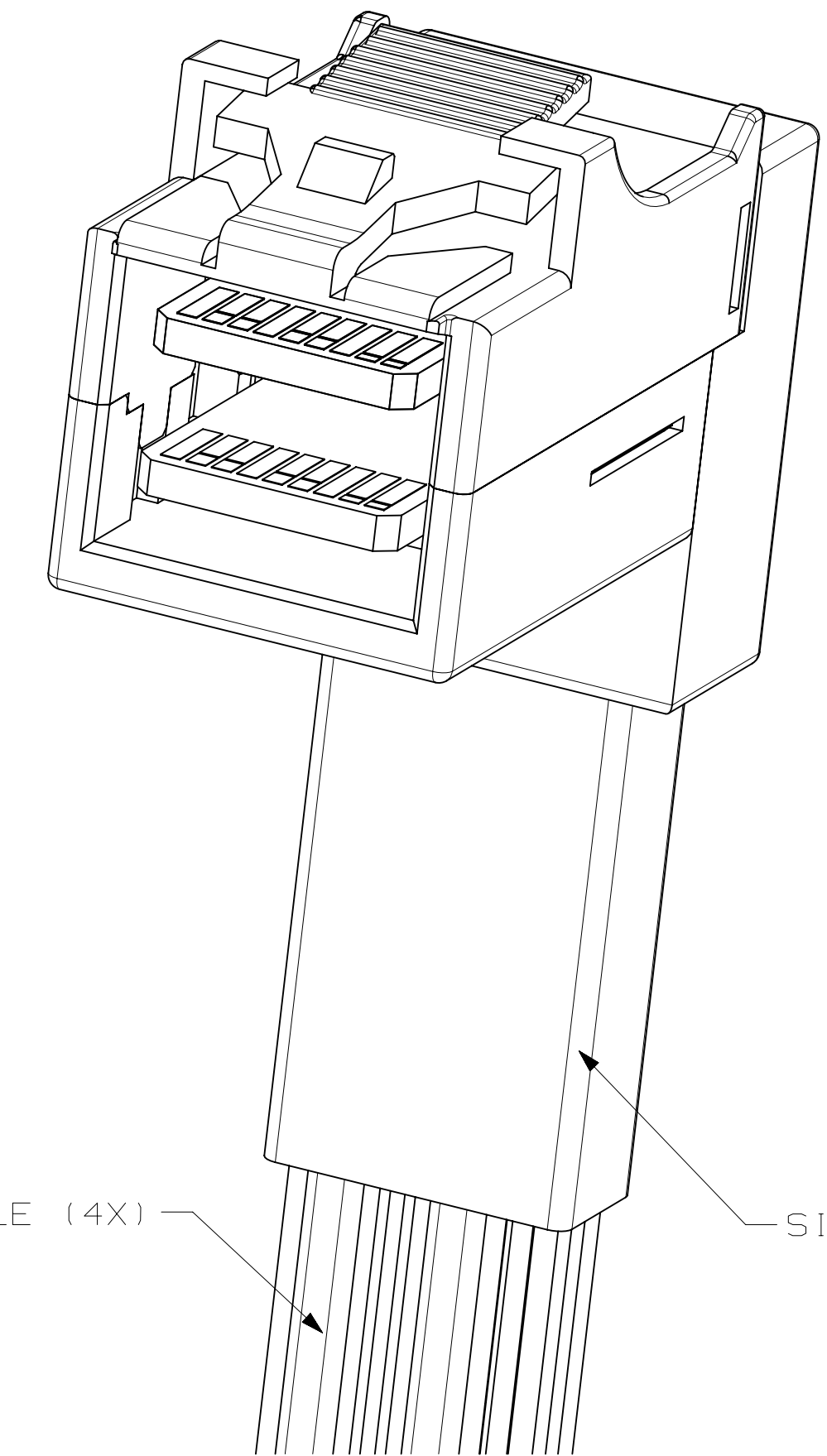
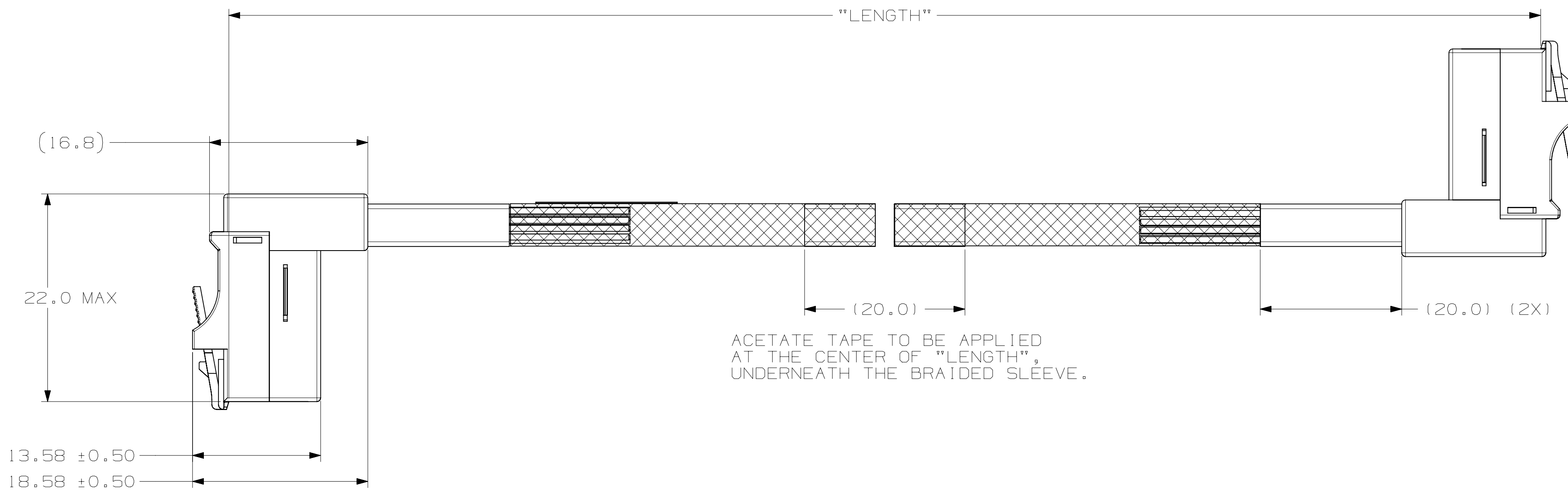
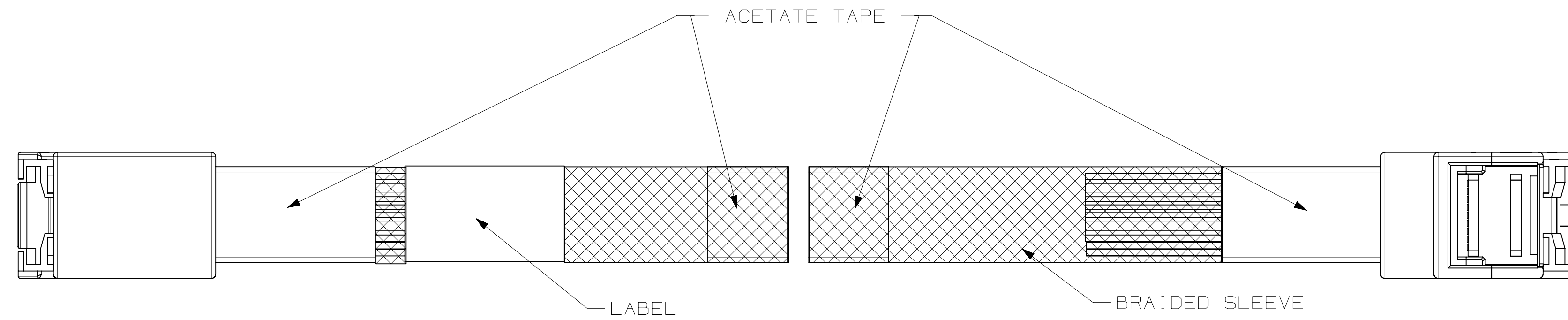


3M™ HIGH ROUTABILITY INTERNAL MINISAS HD CABLE ASSEMBLIES, 8U SERIES

RIGHT-ANGLE - TO - RIGHT-ANGLE INTERNAL MINISAS HD CABLE ASSEMBLY



3M PART NUMBER

8US4-XXX39-00-X.XX
YYWWD

LABEL INFORMATION

LOT NUMBER

DESIGN REFERENCE		NEXT ASSEMBLY		REV	ECO	ISSUE DATE AND DESCRIPTION		DRFT	CHKD
DISTRIBUTION CODES				DRF	KOK HOE LEE	DATE	OCT 17, 2014	MFG	DATE
DIVISION		DIVISION CODE		CHKD	YUNLONG QIAO	DATE	OCT 17, 2014	APPR	DATE
DO NOT SCALE DRAWING		SCALE 1/1		TOLERANCES EXCEPT AS NOTED		INCHES .00 ± .000 ± .0000 ±			
THIRD ANGLE PROJECTION		INTERPRET PER ASME Y14.5 - 1994		MILLIMETERS		0 ±.1 .0 ±.05 .000 ±.005			
MAX SURFACE ROUGHNESS 125		ALL SURFACES MARKED ONLY		CAGE NUMBER		DRAWING NO.		REV.	
				D		78-5100-2651-7		A	
				MODEL		SHT 1 OF 4			

DRAWING NUMBER 78-5100-2651-7

REVISION A

3M™ HIGH ROUTABILITY INTERNAL MINISAS HD CABLE ASSEMBLIES, 8U SERIES

RIGHT-ANGLE - TO - RIGHT-ANGLE INTERNAL MINISAS HD CABLE ASSEMBLY

WIRING DIAGRAMS

3M PART NUMBERING SCHEME

8US4 - XXX 39 - 00 - X.XX

"LENGTH" IN METERS

"LENGTH" TOLERANCE

±10MM FOR "LENGTH" 0.5 METER MAX
±15MM FOR "LENGTH" MORE THAN 0.5 METER

TABLE 1: DESCRIPTION FOR "XXX"

XXX	PINOUT	BRAIDED SLEEVE
AA1	STD MINISAS HD 4i WITH SIDEBANDS (SEE TABLE 2)	YES
AA2	STD MINISAS HD 4i WITH SIDEBANDS (SEE TABLE 2)	NO
CB1	MINISAS HD 4i WITHOUT SIDEBANDS (SEE TABLE 3)	YES
CB2	MINISAS HD 4i WITHOUT SIDEBANDS (SEE TABLE 3)	NO

NOTES

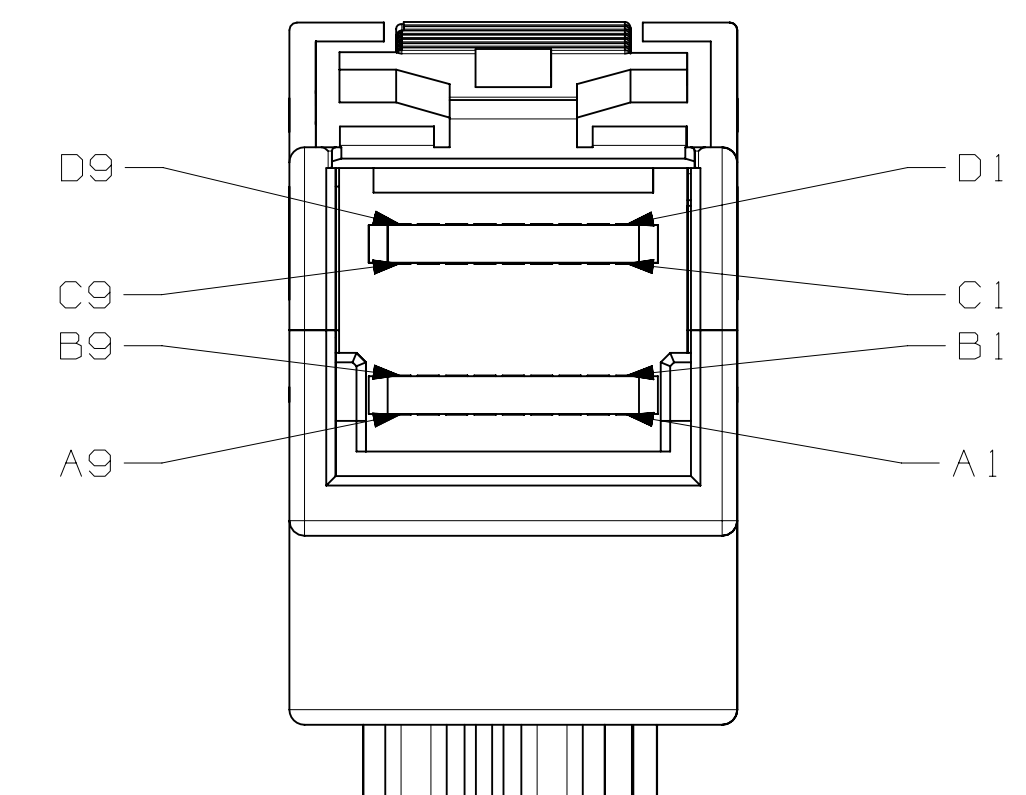
- MATERIALS:
 - HOUSING: THERMOPLASTIC
 - INNERMOULD: THERMOPLASTIC
 - 3M™ TWIN AXIAL CABLE:
 - CONDUCTORS: SOLID COPPER, Ag-PLATED SIGNALS
 - INSULATOR: POLYOLEFIN
 - SHIELDING: ALUMINIUM LAYER
 - SIDEBAND CABLE:
 - CONDUCTORS: SOLID COPPER
 - INSULATOR: THERMOPLASTIC ELASTOMER
 - PCB: LOW DIELECTRIC CONSTANT MATERIAL FOR HIGH SPEED APPLICATION
 - BRAIDED SLEEVE: THERMOPLASTIC
- ROHS COMPLIANT. SEE REGULATORY INFORMATION APPENDIX IN "ROHS COMPLIANCE" SECTION AT WWW.3M.COM/INTERCONNECT (E1 & C1 APPLY)
- UNLESS OTHERWISE NOTED, REFERENCES TO INDUSTRY SPECIFICATIONS ARE INTENDED TO INDICATE SUBSTANTIAL COMPLIANCE TO THE MATERIAL ELEMENTS OF THE SPECIFICATION. SUCH REFERENCES SHOULD NOT BE CONSTRUED AS A GUARANTEE OF COMPLIANCE TO ALL REQUIREMENTS IN A GIVEN SPECIFICATION.
- PRODUCT SPECIFICATION: 78-5102-0200-1

PINOUT 1				
POSITION	SYMBOL		SYMBOL	POSITION
D9	GROUND	—	GROUND	B9
D8	Tx2-	→	Rx2-	B8
D7	Tx2+	→	Rx2+	B7
D6	GROUND	—	GROUND	B6
D5	Tx0-	→	Rx0-	B5
D4	Tx0+	→	Rx0+	B4
D3	GROUND	—	GROUND	B3
D2	SIDEBAND 6	↔	SIDEBAND 5	D1
D1	SIDEBAND 5	↔	SIDEBAND 6	D2
C1	SIDEBAND 4	↔	SIDEBAND 2	C2
C2	SIDEBAND 2	↔	SIDEBAND 4	C1
C3	GROUND	—	GROUND	A3
C4	Tx1+	→	Rx1+	A4
C5	Tx1-	→	Rx1-	A5
C6	GROUND	—	GROUND	A6
C7	Tx3+	→	Rx3+	A7
C8	Tx3-	→	Rx3-	A8
C9	GROUND	—	GROUND	A9
B9	GROUND	—	GROUND	D9
B8	Rx2-	←	Tx2-	D8
B7	Rx2+	←	Tx2+	D7
B6	GROUND	—	GROUND	D6
B5	Rx0-	←	Tx0-	D5
B4	Rx0+	←	Tx0+	D4
B3	GROUND	—	GROUND	D3
B2	SIDEBAND 1	↔	SIDEBAND 3	B1
B1	SIDEBAND 3	↔	SIDEBAND 1	B2
A1	SIDEBAND 7	↔	SIDEBAND 0	A2
A2	SIDEBAND 0	↔	SIDEBAND 7	A1
A3	GROUND	—	GROUND	C3
A4	Rx1+	←	Tx1+	C4
A5	Rx1-	←	Tx1-	C5
A6	GROUND	—	GROUND	C6
A7	Rx3+	←	Tx3+	C7
A8	Rx3-	←	Tx3-	C8
A9	GROUND	—	GROUND	C9

TABLE 2: WITH SIDEBANDS

PINOUT 2				
POSITION	SYMBOL		SYMBOL	POSITION
D9	GROUND	—	GROUND	B9
D8	Tx2-	→	Rx2-	B8
D7	Tx2+	→	Rx2+	B7
D6	GROUND	—	GROUND	B6
D5	Tx0-	→	Rx0-	B5
D4	Tx0+	→	Rx0+	B4
D3	GROUND	—	GROUND	B3
C3	GROUND	—	GROUND	A3
C4	Tx1+	→	Rx1+	A4
C5	Tx1-	→	Rx1-	A5
C6	GROUND	—	GROUND	A6
C7	Tx3+	→	Rx3+	A7
C8	Tx3-	→	Rx3-	A8
C9	GROUND	—	GROUND	A9
B9	GROUND	—	GROUND	D9
B8	Rx2-	←	Tx2-	D8
B7	Rx2+	←	Tx2+	D7
B6	GROUND	—	GROUND	D6
B5	Rx0-	←	Tx0-	D5
B4	Rx0+	←	Tx0+	D4
B3	GROUND	—	GROUND	D3
A3	GROUND	—	GROUND	C3
A4	Rx1+	←	Tx1+	C4
A5	Rx1-	←	Tx1-	C5
A6	GROUND	—	GROUND	C6
A7	Rx3+	←	Tx3+	C7
A8	Rx3-	←	Tx3-	C8
A9	GROUND	—	GROUND	C9

TABLE 3: WITHOUT SIDEBANDS

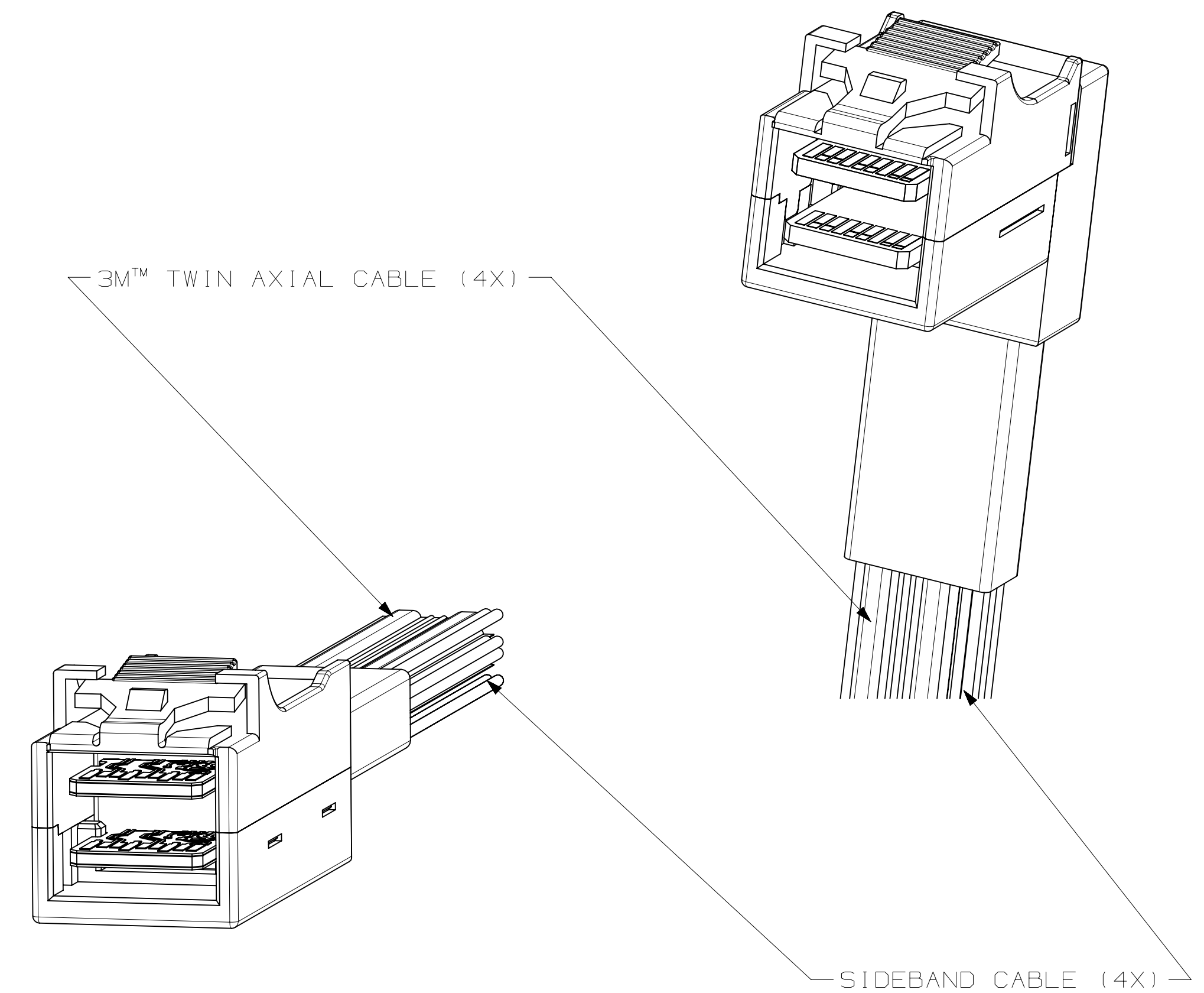
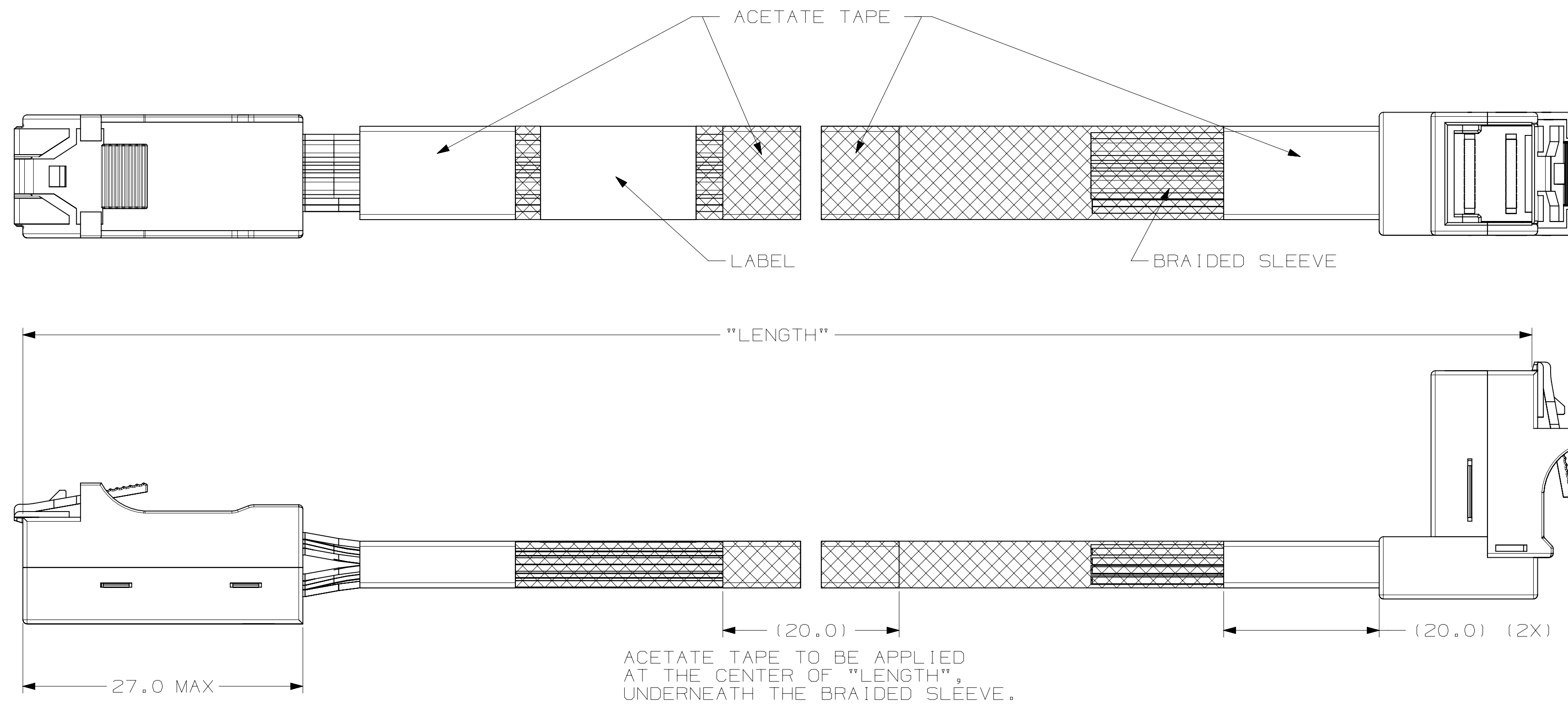


DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
DISTRIBUTION CODES		DRY	KOK HOE LEE	DATE	OCT 17, 2014	MFG
		CHKD	YUNLONG QIAO	DATE	OCT 17, 2014	APPR
						SAJJIT BANDHU
						DATE
						OCT 17, 2014
DIVISION		DIVISION CODE		© 3M COPYR [GHT] 2015 This document and the information it contains are 3M property and may not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.		
DO NOT SCALE DRAWING	SCALE 1/1	TOLERANCES EXCEPT AS NOTED		INCHES .01 .005 .0005 .0002		
THIRD ANGLE PROJECTION		MILLIMETERS		0 .5 .05 .005		
INTERPRET PER ASME Y14.5 - 1994		MAX SURFACE ROUGHNESS		125 <input type="checkbox"/> ALL SURFACES <input checked="" type="checkbox"/> MARKED ONLY		
CAGE NUMBER		SIZE	DRAWING NO.	REV.		
D			78-5100-2651-7	A		
MODEL		SHT		2 OF 4		

78-5100-2651-7 DRAWING NUMBER

3M™ HIGH ROUTABILITY INTERNAL MINISAS HD CABLE ASSEMBLIES, 8U SERIES

RIGHT-ANGLE - TO - STANDARD INTERNAL MINISAS HD CABLE ASSEMBLY



NOTES

- FOR DETAILS ON RIGHT-ANGLE INTERNAL MINISAS HD CABLE ASSEMBLY, REFER TO SHEET 1 AND 2.
- FOR DETAILS ON STANDARD INTERNAL MINISAS HD CABLE ASSEMBLY, REFER TO DRAWING NO. 78-5100-2555-0.

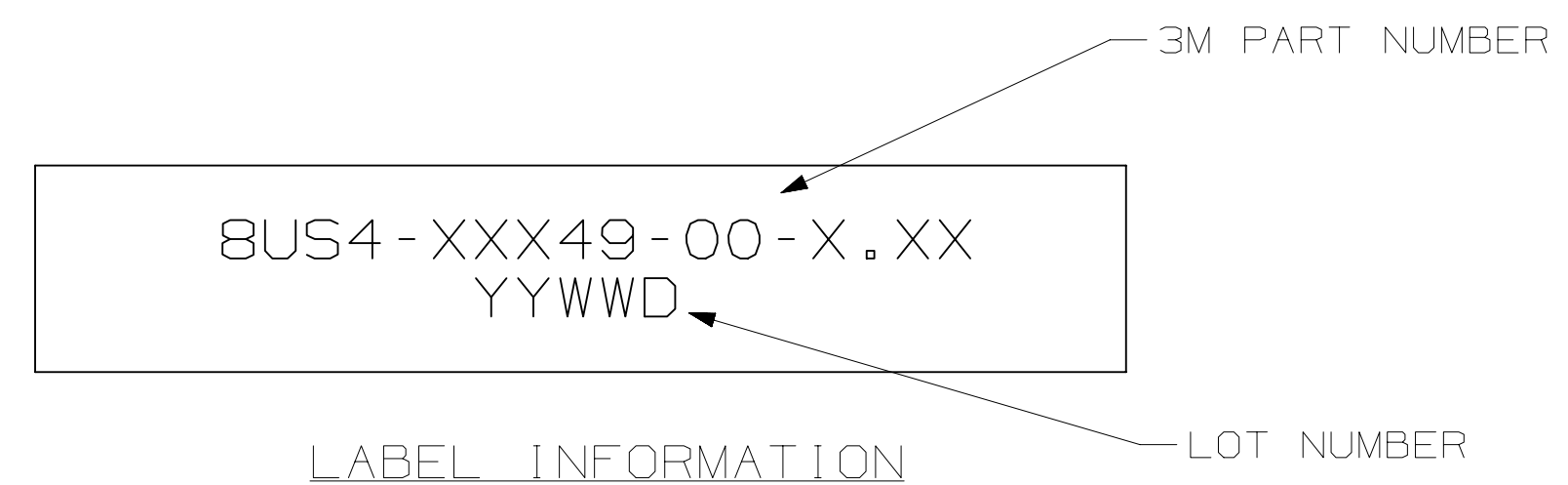
3M PART NUMBERING SCHEME

BUS4 - XXX 49 - 00 - X.XX

"LENGTH" IN METERS
 "LENGTH" TOLERANCE
 ±10MM FOR "LENGTH" 0.5 METER MAX
 ±15MM FOR "LENGTH" MORE THAN 0.5 METER

TABLE 4: DESCRIPTION FOR "XXX"

XXX	PINOUT	BRAIDED SLEEVE
AA1	STD MINISAS HD 4i WITH SIDEBANDS (SEE TABLE 2)	YES
AA2	STD MINISAS HD 4i WITH SIDEBANDS (SEE TABLE 2)	NO
CB1	MINISAS HD 4i WITHOUT SIDEBANDS (SEE TABLE 3)	YES
CB2	MINISAS HD 4i WITHOUT SIDEBANDS (SEE TABLE 3)	NO



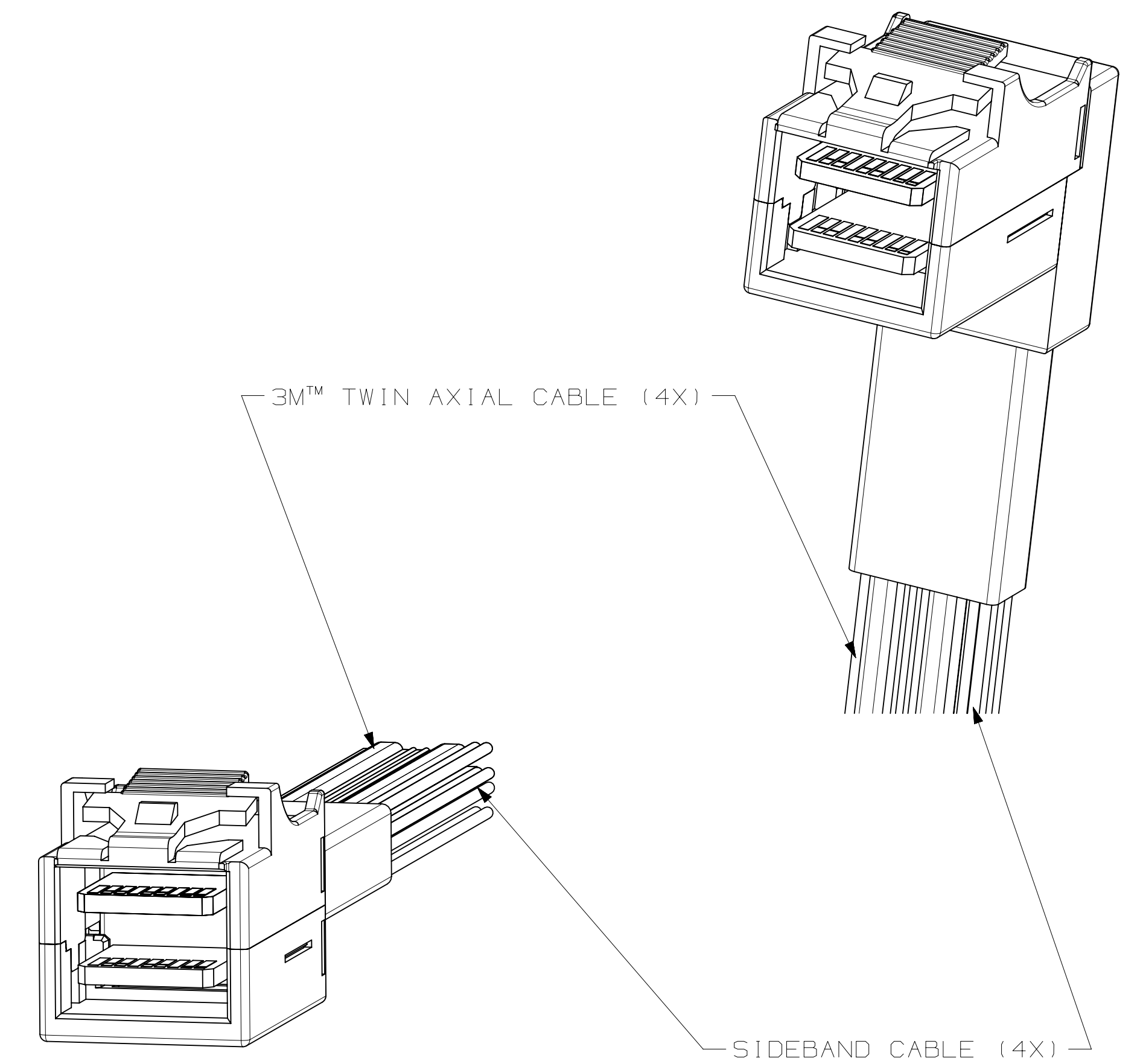
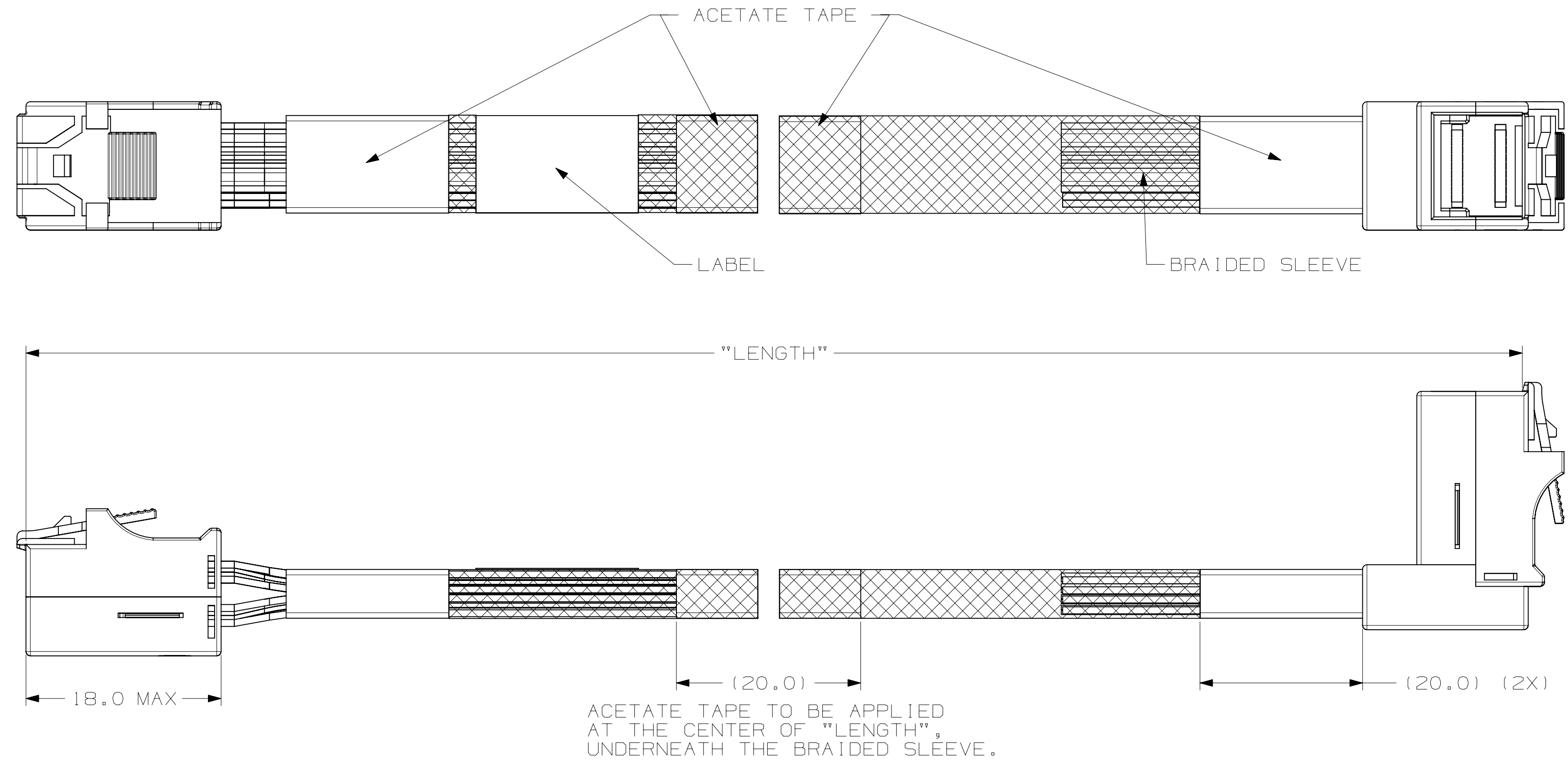
REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
DRY	KOK HOE LEE	DATE OCT 17, 2014	MFG	DATE
CHKD	YUNLONG QIAO	DATE OCT 17, 2014	APPR	DATE
			SAJJIT BANDHU	OCT 17, 2014
DESIGN REFERENCE		NEXT ASSEMBLY		
DISTRIBUTION CODES				
DIVISION		DIVISION CODE		
DO NOT SCALE DRAWING		SCALE 1/1		
THIRD ANGLE PROJECTION		TOLERANCES EXCEPT AS NOTED		
INTERPRET PER ASME Y14.5 - 1994		INCHES		
MAX SURFACE ROUGHNESS 125		MILLIMETERS		
ALL SURFACES MARKED ONLY		0 ± .1		
		.0 ± .5		
		.00 ± .05		
		.000 ± .005		
		ANGLES ± 1°		
CAGE NUMBER		SIZE	DRAWING NO.	REV.
D78-5100-2651-7		D	78-5100-2651-7	A
MODEL		DET		SHT 3 OF 4
		YES NO		

78-5100-2651-7
DRAWING NUMBER

A

3M™ HIGH ROUTABILITY INTERNAL MINISAS HD CABLE ASSEMBLIES, 8U SERIES

RIGHT-ANGLE - TO - SHORTENED INTERNAL MINISAS HD CABLE ASSEMBLY



NOTES

- FOR DETAILS ON RIGHT-ANGLE INTERNAL MINISAS HD CABLE ASSEMBLY, REFER TO SHEET 1 AND 2.
- FOR DETAILS ON SHORTENED INTERNAL MINISAS HD CABLE ASSEMBLY, REFER TO DRAWING NO. 78-5100-2658-2.

3M PART NUMBERING SCHEME

8US4 - XXX 59 - 00 - X.XX

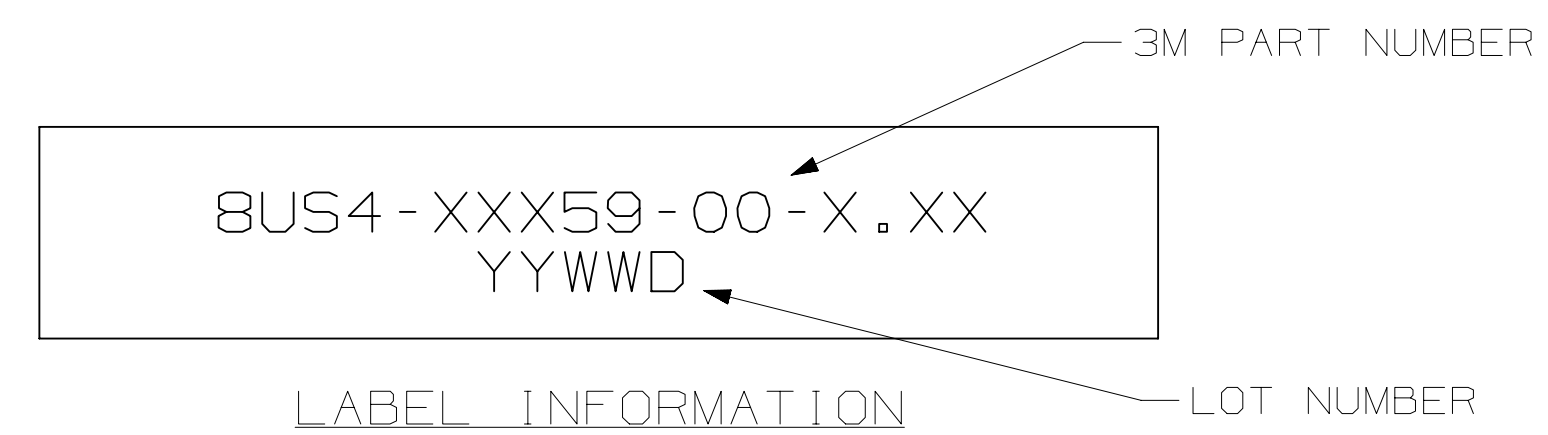
"LENGTH" IN METERS

"LENGTH" TOLERANCE

±10MM FOR "LENGTH" 0.5 METER MAX
±15MM FOR "LENGTH" MORE THAN 0.5 METER

TABLE 5: DESCRIPTION FOR "XXX"

XXX	PINOUT	BRAIDED SLEEVE
AA1	STD MINISAS HD 4i WITH SIDEBANDS (SEE TABLE 2)	YES
AA2	STD MINISAS HD 4i WITH SIDEBANDS (SEE TABLE 2)	NO
CB1	MINISAS HD 4i WITHOUT SIDEBANDS (SEE TABLE 3)	YES
CB2	MINISAS HD 4i WITHOUT SIDEBANDS (SEE TABLE 3)	NO



REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
		OCT 17, 2014		
DRW	KOK HOE LEE	DATE	MFG	DATE
CHKD	YUNLONG QIAO	DATE	APPRV	DATE
		OCT 17, 2014	SAJJIT BANDHU	OCT 17, 2014
DESIGN REFERENCE		NEXT ASSEMBLY		
DISTRIBUTION CODES		DIVISION CODE		
DO NOT SCALE DRAWING	SCALE 1/1	TOLERANCES EXCEPT AS NOTED		
THIRD ANGLE PROJECTION		INCHES		
INTERPRET PER ASME Y14.5 - 1994		MILLIMETERS		
MAX SURFACE ROUGHNESS		ANGLES ±1°		
125	<input type="checkbox"/> ALL SURFACES			
	<input checked="" type="checkbox"/> MARKED ONLY			
CAGE NUMBER		SIZE	DRAWING NO.	REV.
D			78-5100-2651-7	A
MODEL		SHT 4 OF 4		

78-5100-2651-7
DRAWING NUMBER
A REVISION

Mouser Electronics

Authorized Distributor

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[8US4-AA129-00-0.50](#)